

Weekly Report

11/24/2014 - 11/30/2014

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1 Summary

This week I mainly focused on group seminar presentation and the driving class.

2 Projects

2.1 Project 1 - Rank Visualization

A few bugs fixed. The off-rank items still interfere the similarity computation, *adjustment of similarity measurement* is required.

2014 dataset is generated but with a couple of days missing. Due to poor network connection, I'll download the dataset remotely from a VACCINE machine. A Little More: Currently we just show similar items of a certain item, but we also want to endue semantic information to similar items and their connections. I will try to *fetch corresponding semantic data from existing knowledge graph* database such as DBpedia.

2.2 Project 2 - Data Inspection

Yemenite and I had a short review and discussion of the data inspection project. Since *the inspection view* already has got too many views to show, we'll make *the control view* (view mind map) another page. The separate view would give both views more visual space and they can also communicate via different machine, even different platform (for future pad extension maybe?).

2.3 Project 3 - NBA Game Visualization

We had the first project discussion this week.

3 Paper Reading

InfoVis session: exploratory data analysis fast forward.

- * The Effects of Interactive Latency on Exploratory Visual Analysis
Authors: Zhicheng Liu, Jeffrey Heer
A user study that explores how interactive latency effecting users' behavior and strategy. Users' interaction logs are collected and a think-aloud protocol is applied.
- * Visualizing Statistical Mix Effects and Simpson's Paradox
Authors: Zan Armstrong, Martin Wattenberg
A technique called Comet Chart that visualizes Simpson's Paradox.
- * Error Bars Considered Harmful: Exploring Alternate Encodings for Mean and Error
Authors: Michael Correll, Michael Gleicher
A user study that compares the four existing mean and error visualization techniques. Gradient plot and Violin plot are considered better alternatives than box plot in visualizing mean and error.
- * Four Experiments on the Perception of Bar Charts
Authors: Justin Talbot, Vidya Setlur, Anushka Anand
As clear as it stated with the title.
- * Visual Parameter Space Analysis: A Conceptual Framework
Authors: Michael Sedlmair, Christoph Heinzl, Harald Piringer, Stefan Bruckner, Torsten Mller
A survey of 21 parameter space analysis papers, resulting in a conceptual generalization of visual parameter space analysis.

4 Miscellaneous

This week I had three driving classes, each for a whole morning.

5 To Do List

1. TopK: adjustment of similarity measurement
2. TopK: semantic information from DBPedia.
3. TopK: Dataset fix up.
4. TopK: A more detailed draft of paper.
5. NBA project discussion and data inspection project discussion.
6. Taking driving class.